

# **HYDROTEK INTERNATIONAL, INC.**

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Phone (800)922-9883 / Fax (866)670-5580

[www.hydrotekintl.com](http://www.hydrotekintl.com)

## **OPERATION & MAINTENANCE MANUAL**

**HYDROTEK MODEL #H-6700C FAUCET**

TECHNICAL SUPPORT TEAM:

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**Solid Brass AC or Battery Powered**

# Automatic Faucet

6700C Series

ISO 9002 Certified

## High Technology For No Touch Operation

- ADA Compliant. Meets all barrier free codes
- Conserves water and energy
- Easily installed in new or retrofit applications
- Competitively priced for today's commercial market
- Promotes cleanliness & hygiene
- Proven Hydrotek craftsmanship and reliability



**6700C Series**

U.S. Patent: 6192530B1

## Features:

- **ACCU-SENSE** adjustable sensor eyes.
- Chrome plated, solid brass construction.
- Wall mountable, waterproof control box with armored, vandal resistant control and power cables.
- Preset/adjustable sensor range 6" - 30" for various installation requirements.
- Standard automatic time-out feature. Preset at 0 but adjustable to 15, 30 or 60 seconds. Prevents accidental sink overflow.
- Shut-off delay is adjustable from 1 second (preset) to 8 seconds.
- Includes in-line filters with clean-out trap to reduce maintenance costs.
- Standard 6" gooseneck spout and 2.0 GPM laminar flow control.
- Single-hole, wall/splash mounting.
- All parts are field replaceable to ensure quick and easy repair.
- Same faucet, field switchable to/from AC Powered or Battery Powered.
- Slow closing, piston-operated solenoid valve provides reliable and smooth operation without water hammer.
- Superior VSI silicone elastomer piston seals are unaffected by chlorine, chloramines or ammonia.
- Control module automatically performs a unique self-check of all electrical components.
- No-touch system enhances hygiene in the medical, institutional, food service industries, etc.

# Hydrotek Automatic Gooseneck Faucet

## Non-Mixing / Wall Mounted

Model H-6700C (AC) or HB-6700C (Battery)

Meets ANSI/ASME A112.18.1M-1989

### Operation:

1. A continuous, invisible beam is emitted from the sensor.
2. The faucet is activated by placing hands under the spout within the effective range of the beam. Water starts to flow immediately for as long as the user's hands remain in the sensor range.
3. When hands are removed, the water flow stops. The sensor will automatically reset and be ready for the next user.
4. In battery powered mode, flashing red light will indicate low battery condition.

### Specifications:

Faucet Construction:  
Control Circuit

- Solid Brass, Chrome Plated
- Solid state, AC or Battery, Switchable
- Preset and Adjustable for 0, 15, 30, or 60 seconds
- Preset and Adjustable
- Preset and Adjustable from 1 - 8 seconds
- Armored, Vandal Resistant
- 6V DC, Normally closed
- Wattage: 0.4W (idle), 5W (in use)
- Operating Pressure: 5psi to 125psi
- 2.0 GPM, Laminar

Auto. Time-out:

Sensor Range:  
Shut-Off Delay:

Control Cable:  
Solenoid Valve:

Flow Control:

### AC Mode

Power Adapter

Standard plug-in:  
(UL/CSA)

Power Cable:

Optional Multi-Unit Adapter  
(UL/CSA)

- Input AC 120V 60 Hz or 220 V
- Output DC 12V, 0.8A/Class 2
- Armored, Vandal Resistant
- Serves up to 8 Faucets
- Input AC 120V, Output DC 12V, 3A

### Battery Mode

Battery Powered Models:

Service Life:

- (4) AA Alkaline Batteries Battery
- 400,000 on/off cycles, up to 4 years

Standard Package Includes:

### H-6700C (AC)

### HB-6700C (Bat)

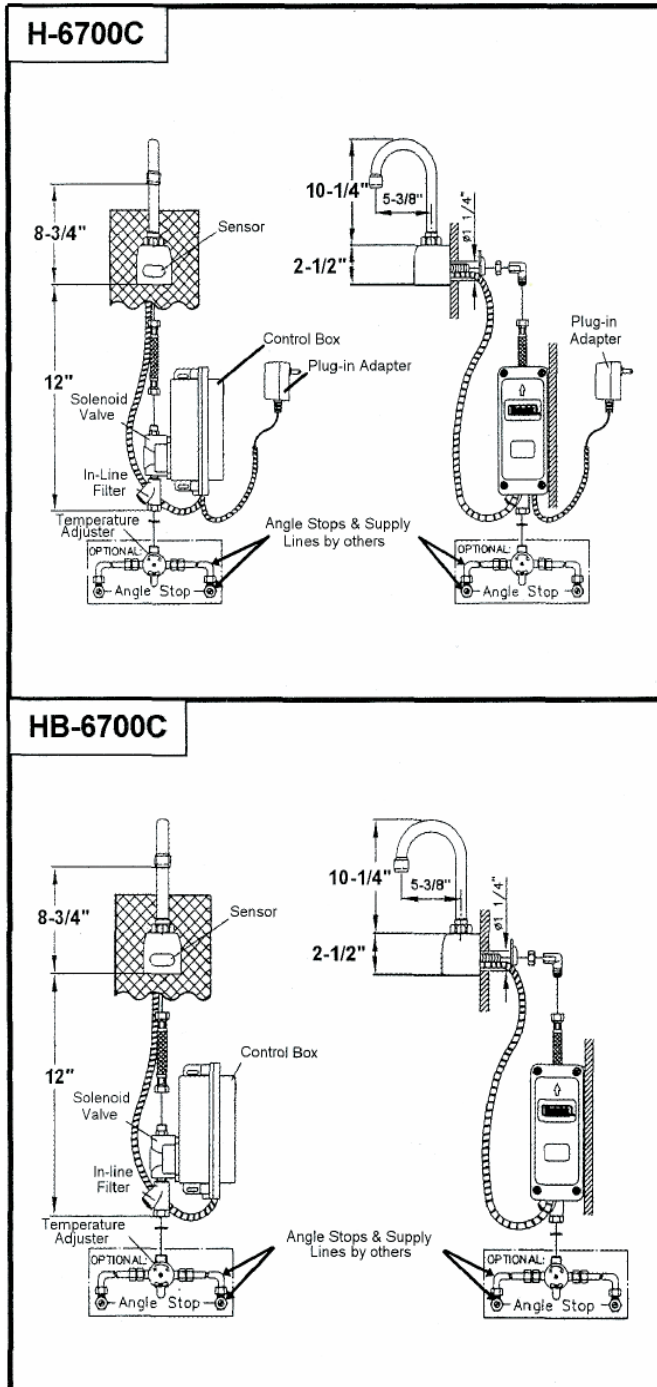
X	(1) Faucet with Electronic Sensor	X
X	(1) Control Box w/6V DC Solenoid	X
X	(1) 12V DC Plug-in Power Adapter	
X	(1) In-Line Filter with Clean-Out Trap	X
X	(1) 18" Flex, S.S. Supply Tube, 3/8"	X
X	(1) Mounting Hardware	X
X	(1) 6" Gooseneck Spout	X
X	(1) 2.0 GPM V.R. Laminar Flow Control	X
	(4) AA Alkaline Batteries	X
	(1) Battery Holder	X

### Dimensions:

Base Width (Outside Measurement)	2-1/4"
Base Depth	2-1/2"
Faucet Height (Aerator to Base)	8-3/4"
Faucet Height Overall	12-3/4"
Depth (Center of Aerator to Center of Faucet Base)	5-3/8"
Mounting Bolt Length	1-7/16"
Mounting Bolt Pattern	Single-Hole Mount

### Optional Variations and Accessories:

- 1.6 GPM Soft-Flow Aerator 1.5 & 2.5 GPM Laminar Flow Control and Rose Spray Head
- HC-010 Multi-Unit Voltage Adapter (AC Powered Only)
- HC-001 Mixing/Check Valve (Mechanical)
- HBL-04 Thermostatic Mixing Valve with Checks
- 8" deep Gooseneck and 6" or 8" Swing Spout



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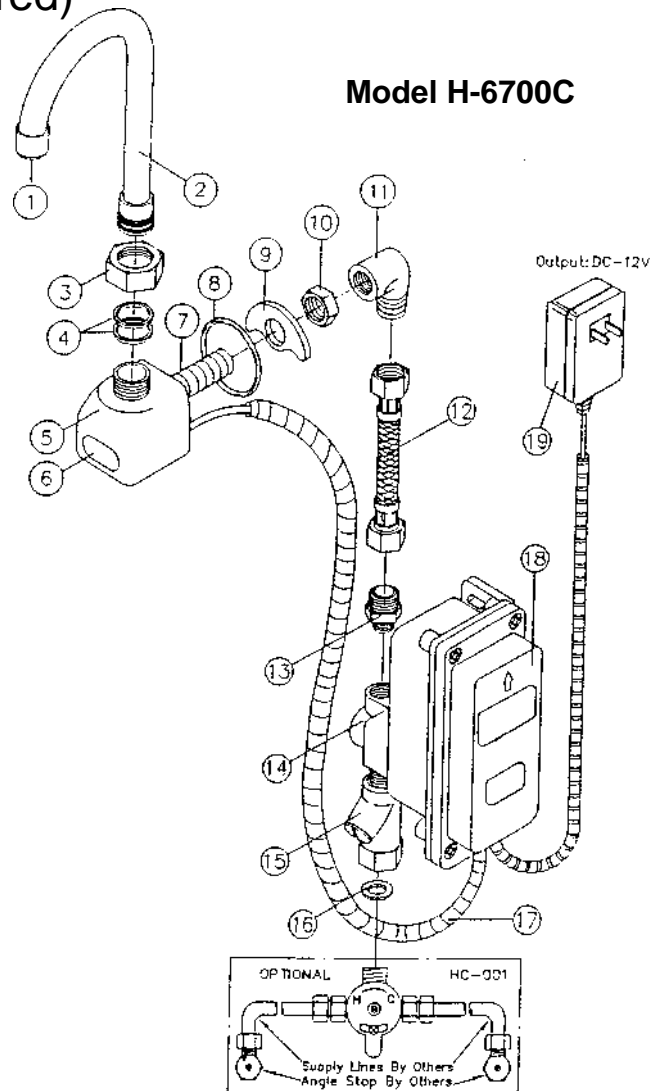
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# INSTALLATION INSTRUCTIONS

## Hydrotek Non-Mixing Automatic Faucet (AC Powered)

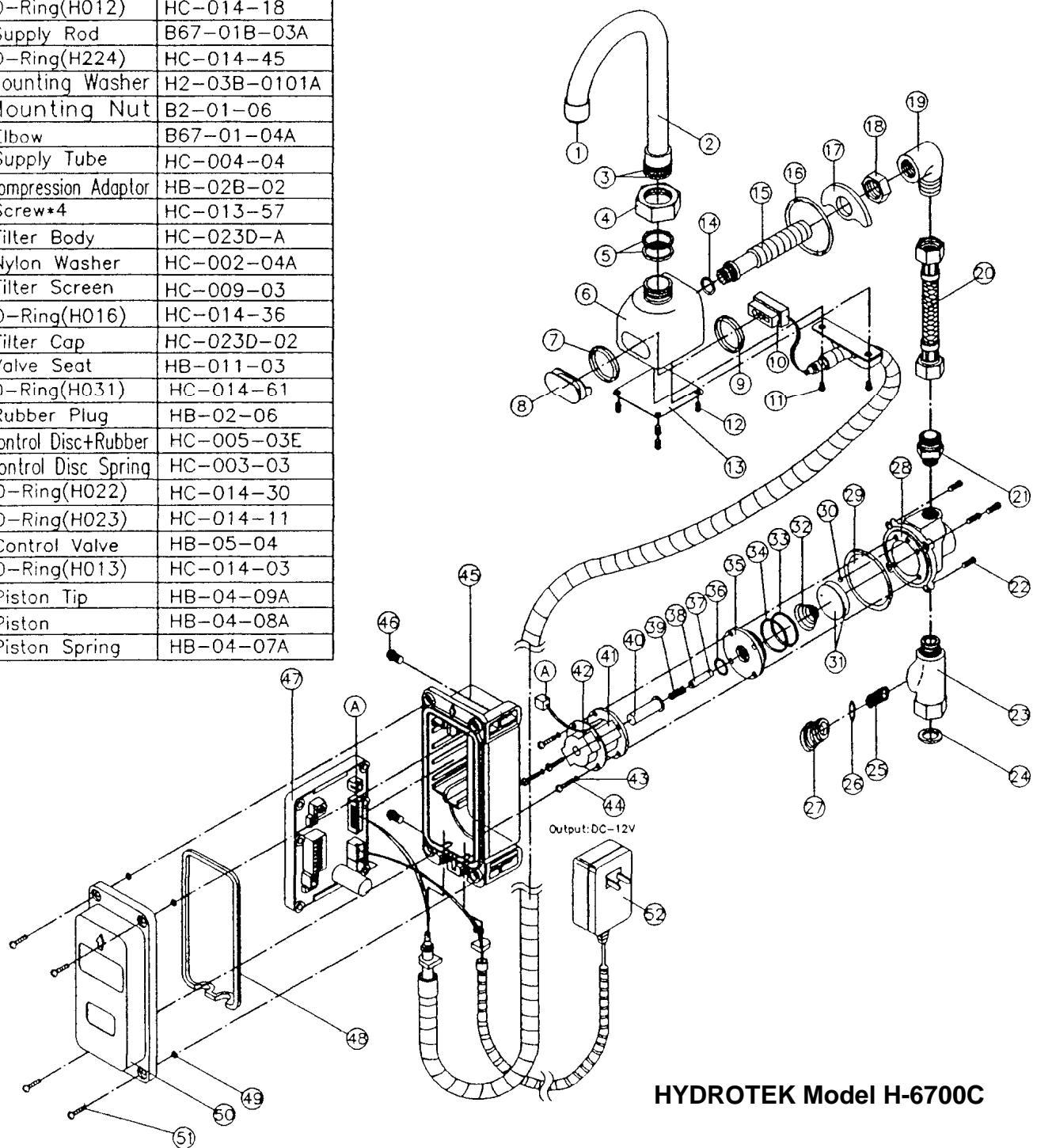
1. Prior to installing this faucet, thoroughly flush all water lines and replace stop washers, if necessary.
2. To ensure proper operation, " DRY TEST " the faucet by plugging (17) Sensor eye cable connector into the matching connector on the PC board inside the (18) Control box. Plug (19) Power adapter output connector into matching connector on PC board located inside the (18) Control box. Plug (19) Power adapter into 120 V AC outlet. Place your hand in front of faucet sensor eye. If there is a clicking sound, the faucet is activating properly. If not, call the factory.
3. After successful "DRY TEST," unplug connectors from both the Sensor eye cable and Power adapter to the PC board.
4. Loosen (1) Flow control device and assemble (2) Gooseneck spout using (4) Split washers and (3) Spout nut. Mount Gooseneck spout onto (5) Faucet body. Feed (17) Sensor eye cable through sink wall and mount faucet onto the sink using (8) O-ring, (9) Washer, and (10) Mounting nut. Attach (11) 90 Degree elbow to (7) Supply rod.
5. Connect electrical Sensor eye cable and Power adapter as described in STEP #2, making sure that the Sensor eye and Power adapter cables are seated into the Control box housing properly.
6. Attach (13) Compression fitting to (14) Solenoid valve and connect it to the (11) Elbow using (12) Supply tube. Insert (16) Nylon washer into the swivel nut located on the (15) In-line filter inlet (**for pre-tempered or cold water only**). Using a union fitting (not supplied), connect supply line (not supplied) from supply stop to (15) In-line filter inlet swivel nut (**for tempered water**).  
 >>Attach optional Hydrotek HC-001 Mixing/Check Valve or HC-003 Mixing "T" w/checks to In-line filter inlet. Connect supply lines (not supplied) from hot and cold supply stops to Mixing valve or Mixing "T" inlets.  
**Use Teflon Tape, not Pipe Dope for all connections.**
7. Turn on water and check for leaks. Plug (19) Power adapter into 120V AC outlet. Reinstall Control box cover and tighten screws to insure that the box is water-resistant. Coil excess Power Adapter wire and secure in a safe, dry area. Place hand in front of Sensor eye to activate water flow. Remove hands and water should stop. If not, refer to troubleshooting guide.
8. Periodically clean the filter element located inside the In-line filter.
9. For minor adjustments, refer to the instructions located inside the Control box cover.



Part Number Descriptions	
1. Laminar flow control	11. 90 Degree elbow
2. Gooseneck spout	12. Supply tube
3. Spout nut	13. Compression fitting
4. Split washer	14. Solenoid valve
5. Faucet body	15. In-line filter
6. LED sensor	16. Nylon washer
7. Supply rod	17. Sensor eye cable
8. O-ring	18. Control box
9. Washer	19. Power adapter
10. Mounting nut	

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NO	DESCRIPTION	PART NO.	NO	DESCRIPTION	PART NO.
1	Flow Control Device	HC-015D-A	40	Piston Shaft	HB-04-06A
2	Gooseneck Spout	HC-026D-01	41	Coil	HB-04-05A
3	O-Ring(H018)*2	HC-014-09	42	Metal Gasket	HB-04B-E
4	Spout Nut	H4-01D-02A	43	Lock Washer *4	HB-01-20
5	Spil Washer*2	H4-01-03	44	Screw *4	HC-013-35
6	Body	B67-01D-01B	45	Control Box	HB-012-0101
7	O-Ring(H118)	HC-014-16	46	Screw *2	HC-013-52
8	Sensor Cover	PC-004-31A	47	P.C.B	PC-009-32
9	O-Ring(H021)	HC-014-33	48	Rubber Seal	HB-012-0102
10	Sensor Eye & Cable	PC-006-28	49	O-Ring(006)*4	HC-014-62
11	Screw*2	HC-013-27	50	Box Cover	HB-012-0201
12	Screw*4	HC-013-04	51	Screw *4	HC-013-52
13	Bottom Cover	B67-01-02A	52	Ac Adaptor	HC-012-07D
14	O-Ring(H012)	HC-014-18			
15	Supply Rod	B67-01B-03A			
16	O-Ring(H224)	HC-014-45			
17	Mounting Washer	H2-03B-0101A			
18	Mounting Nut	B2-01-06			
19	Elbow	B67-01-04A			
20	Supply Tube	HC-004-04			
21	Compression Adaptor	HB-02B-02			
22	Screw*4	HC-013-57			
23	Filter Body	HC-023D-A			
24	Nylon Washer	HC-002-04A			
25	Filter Screen	HC-009-03			
26	O-Ring(H016)	HC-014-36			
27	Filter Cap	HC-023D-02			
28	Valve Seat	HB-011-03			
29	O-Ring(H031)	HC-014-61			
30	Rubber Plug	HB-02-06			
31	Control Disc+Rubber	HC-005-03E			
32	Control Disc Spring	HC-003-03			
33	O-Ring(H022)	HC-014-30			
34	O-Ring(H023)	HC-014-11			
35	Control Valve	HB-05-04			
36	O-Ring(H013)	HC-014-03			
37	Piston Tip	HB-04-09A			
38	Piston	HB-04-08A			
39	Piston Spring	HB-04-07A			



**HYDROTEK Model H-6700C**

# HYDROTEK AUTOMATIC FAUCET TROUBLESHOOTING GUIDE

(AC Powered)

Normal Operation: When power is connected or RESET button is pushed, the lights on the Printed Circuit Board (PCB) will blink in the following sequence: red – red (with solenoid clicking) – green – red – red. Green light will remain lit. When the user's hands are placed under the spout, the red indicator light on the faucet and PC board will illuminate and water will begin to flow. Water flow will stop when hands are removed. Always push the RESET button BEFORE attempting to diagnose any problem and AFTER taking corrective action.

<u>PROBLEM</u>	<u>POSSIBLE CAUSE</u>	<u>TO DIAGNOSE</u>	<u>REMEDY</u>
<b>Faucet will not turn on:</b>	Water not turned on.	Check water supply.	Turn water on.
	Power supply failure.	Check power adapter voltage, polarity, wires, and connections.	Replace power adapter and reconnect. Push RESET button.
	Sensor distance is too short.	Use hand/palm to find focal point of sensor beam.	To adjust sensor distance out, turn adjustment clockwise. Push RESET button.
	Electronic PCB is defective.	With power adapter plugged in, push RESET button. No light, no action.	Replace PCB.
	Sensor eyes are defective.	With power adapter plugged in, place hands in front of sensor eyes. Indicator light on faucet does not blink.	Replace sensor eyes and cable.
	Solenoid valve is clogged.	Solenoid is clicking but no water is coming out.	Clean solenoid and blow free all by-pass holes. Replace control disc. Push RESET button.
	In-line filter is clogged.	Open clean-out trap and check filter screen.	Clean or replace filter screen.
	Solenoid coil is defective.	With power adapter plugged in, push the RESET button. Light blinks but no solenoid clicking.	Replace solenoid coil. Push RESET button.

**Faucet will not shut off:** Solenoid valve is normally closed. Turn off water and activate faucet. If there is a clicking sound, the solenoid valve is dirty. If there is no clicking sound, then replace solenoid valve. Other factors could be problematic (Sensor distance adjustment could be too long or electronic PCB could be defective). If the faucet is dripping, the solenoid valve needs a rebuild kit. Follow the same procedures as above for remedies.

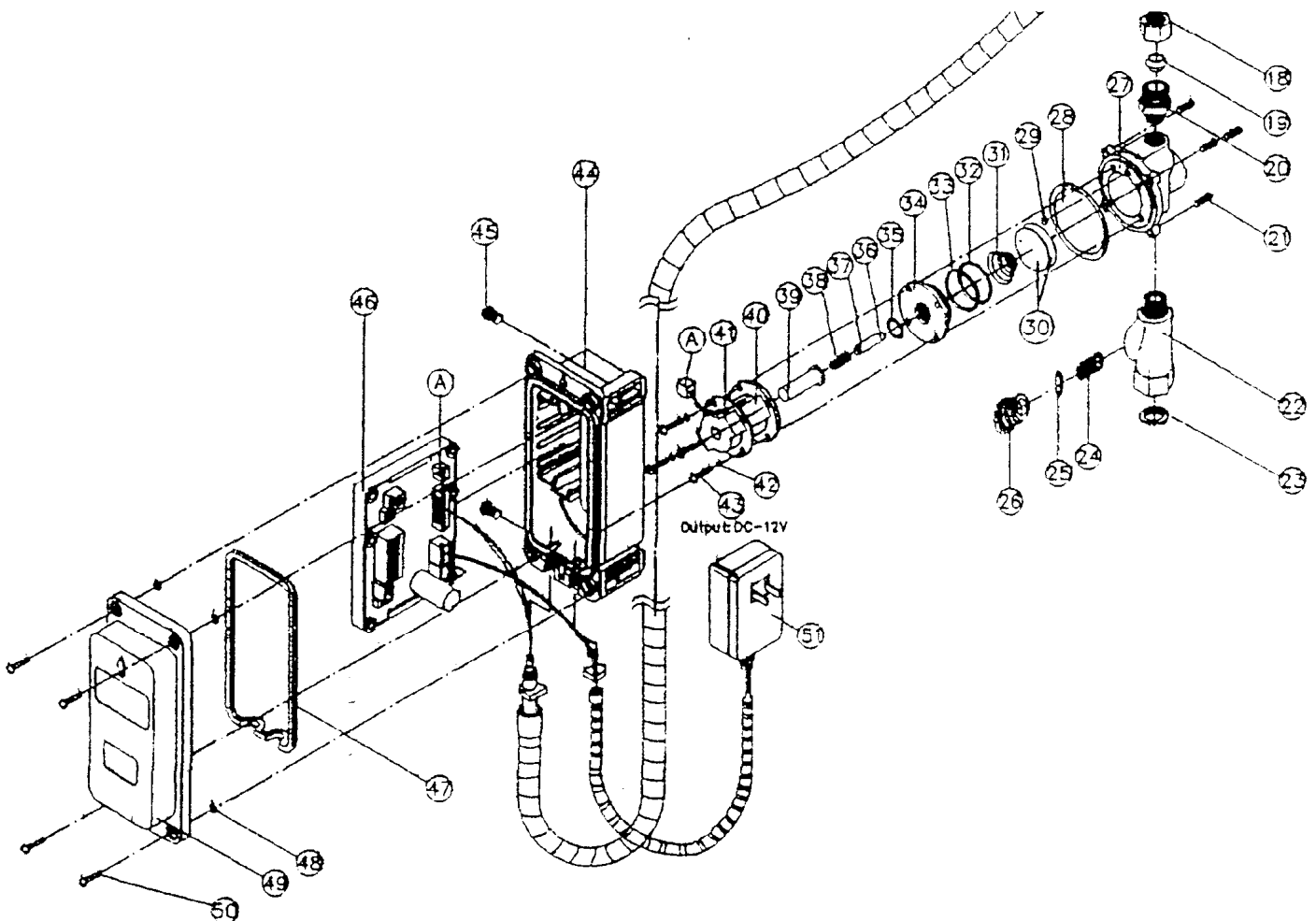
**IMPORTANT:** Periodic maintenance is required for smooth and trouble-free operation of this faucet.

*For more detailed remedy procedures, please call Hydrotek Tech Support at (800)922-9883 ext. 105*

## SOLENOID VALVE CLEANING FOR HYDROTEK 1000C, 2603C, 6000C, 6700C FAUCETS (AC AND BATTERY POWERED)

1. Turn off water supply at stop valve.
2. Remove control box (if possible) to gain access to the solenoid valve.
3. Remove four Screws (#21) and separate the valve from the box.
4. Remove four Coil Screws (#43) and separate Coil (#41) from Valve Seat (#27).
5. When separating Plastic Control Valve (#34) be careful to retain the small Orange Rubber Plug (#29). Re-install this on Brass Valve Seat (#27).
6. Clean or replace Control Disc (#30), Disc Spring (#31), Piston & Tip (#36 and 37), Piston Spring (#38), and check Sleeve (#39) for corrosion.
7. Re-install all parts in same order as the diagram below.
8. Re-install solenoid on the control box and re-mount box in water line.
9. Check and clean Filter Screen (#24) in Filter Body (#22).
10. Reset P.C. Board and make sure solenoid clicks open and thumps closed.
11. Turn on water and check for leaks and proper operation.

*(For further questions, please call Hydrotek Tech Support at 1-800-922-9883 ext. 105)*

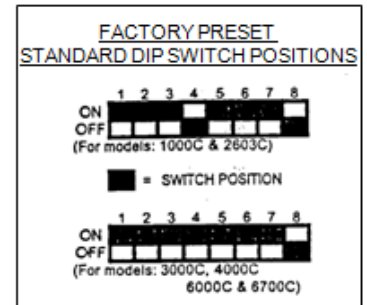


# HYDROTEK AUTOMATIC FAUCET: DIP SWITCHES

**\*NOTE: ALWAYS PUSH THE RESET BUTTON AFTER ANY ADJUSTMENTS\***

A. Shut Off Time Delay (After hands are removed):

Sw 1	Sw 2	Sw 3	Time Delay
ON	ON	ON	1-Sec
ON	ON	OFF	2-Sec
ON	OFF	ON	3-Sec
ON	OFF	OFF	4-Sec
OFF	ON	ON	5-Sec
OFF	ON	OFF	6-Sec
OFF	OFF	ON	7-Sec
OFF	OFF	OFF	8-Sec



B. Automatic Time Off (Maximum run time after activation):

Sw 4	Sw 5	Time Off
ON	ON	0 Sec
ON	OFF	15 Sec
OFF	ON	30 Sec
OFF	OFF	60 Sec

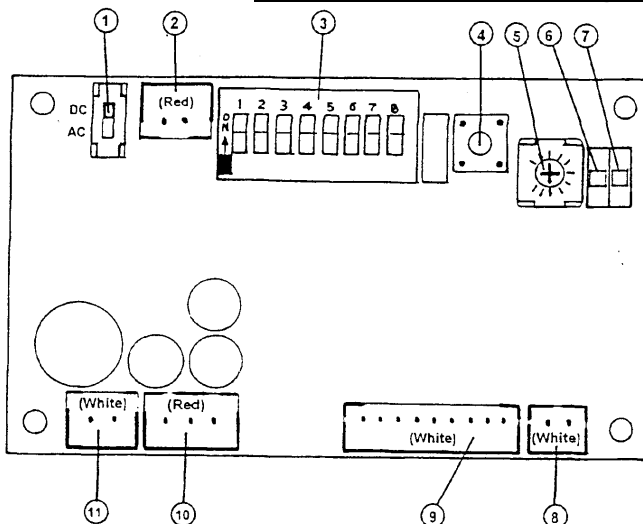
C. Sensor Distance: To increase distance, turn SDA screw clockwise.  
To decrease distance, turn screw counter-clockwise.

Sw 6	Mode	Distance
ON	Std	4" – 12"
OFF	Enhanced	10" – 24"

D. Faucet Switch:

Sw 7	Sw 8	Product
ON	OFF	Auto Faucet

## Control Module Diagram for C-Series Faucets



1. AC/DC Switch
2. Battery Holder Pin Connector (Red)
3. Dip Switches
4. Reset Button
5. Sensor Distance Adjustment (SDA)
6. Indicator LED (Green)
7. Indicator LED (Red)
8. Solenoid Pin Connector (White)
9. Sensor Eye Control Cable (White)
10. AC Power Adapter Pin Connector (Red)
11. Battery Holder Pin Connector (White)

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**Suggested Backup Parts for 6700C Series Faucets**  
 AC or Battery Powered Lavatory Faucets

<b>Part Number From Drawing</b>	<b>Hydrotek Item Code</b>	<b>Description</b>
49	HCC-002	AA 1.5V Battery *4 req. per faucet (for Battery Model)
52	HCC-008B	12V AC Adapter (for AC Model)
23-27	HC-009B	In-line filter
10	HCC-033	Sensor Eyes & Cable
47 47	HCC-011A HCC-011B	Module – PCB for AC Model Module – PCB for Battery Model
17-18	HC-015C	Mounting Kit
25	HC-020	Filter Screen
20	HC-025E	Flexible Supply Tube
1	HB-003CF	Laminar Flow Control
31,32,36,37,38,39	HCB-017A	Valve Repair Kit
41-42	HCC-019	Solenoid Coil Only
27-54	HCC-003B	Complete Control Box Assembly

*(Please visit [www.hydrotekintl.com](http://www.hydrotekintl.com) to view our most current Products Pricing Sheet)*